



**Can You Prevail In The Pursuit Of Crestal Bone Preservation?**  
*The Certain® PREVAIL® Implant...Now Prevailing With More Options*

- **Integrated Platform Switching To Aid In Crestal Bone Preservation\***
- **Proven OSSEOTITE® Surface And NanoTite™ Surface Extend Up To The Seating Platform To Increase Bone-To-Implant-Contact**
- **Certain QuickSeat® Connection Produces An Audible And Tactile Click Confirming Proper Seating**



Certain Straight  
PREVAIL

Certain Expanded  
Platform PREVAIL

NanoTite Tapered  
PREVAIL

\*See Peer Reviewed Publications

## The Historic Quest For Bone Preservation

Ancient civilizations searched for ways to preserve bone. With the proper tools, they were able to prevail!

## The Latest Advancement In Bone Preservation... The Certain® PREVAIL® Implant:

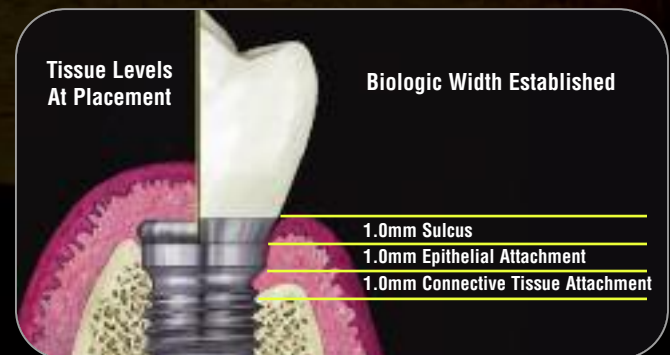
- Designed to potentially enhance crestal bone preservation by medializing the Implant-Abutment Junction (IAJ) with Integrated Platform Switching - The intentional placement of a smaller diameter abutment on a larger diameter implant platform
- Innovative surface technologies that extend up to the seating platform to increase surface area and Bone-To-Implant Contact (BIC)
- Featuring the Certain QuickSeat® Connection with an audible and tactile click confirming proper abutment seating
- **Now Available:** NanoTite™ Tapered PREVAIL Implant; ideal for cases where a tapered shape may be preferred and early stability is desired
- Straight collar design for tight interdental spaces or where ridge width is limited
- Expanded collar design maximizes cortical bone contact to provide crestal locking

## The Prevailing Biologic Width Hypothesis<sup>5</sup>

The key driver of crestal bone remodeling is an important phenomenon that occurs around natural teeth and implants called the **biologic width** – the natural seal that develops around any object protruding from the bone and through the tissue into the oral environment. This seal isolates the bone from the oral environment.

Around natural healthy teeth, the biologic width consists of approximately 1.0mm of connective tissue and 1.0mm of epithelium. On top of these two tissue layers is at least 1.0mm or more of sulcular depth.

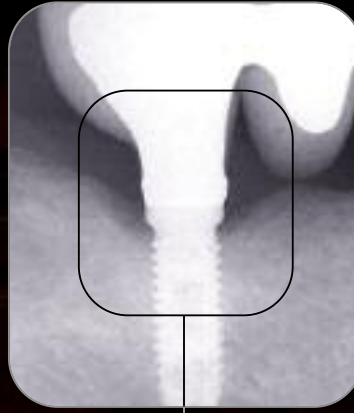
The biologic width term essentially pertains to the physiologic attachment apparatus made up of the connective tissue and epithelium – or approximately 2.0mm. When implants are initially placed within bone and then covered with an adequate layer of soft tissue (first-stage surgery), there is typically little or no crestal bone resorption. When the implant is uncovered (in second-stage surgery) and connected to an abutment, the body then reacts and in the process of creating the biologic width, the crestal bone may resorb.



The 3.0mm of required tissue depth includes 2.0mm of biologic width around natural teeth and implants

## The Need For Better Crestal Bone Preservation Emerges

Traditional two-stage implants have enjoyed a long history of clinical success and have offered surgical and prosthetic versatility. However, throughout the years it was recognized that this implant construct could be associated with a modest amount of crestal bone loss that tended to stabilize long-term at the first implant thread. Loss of crestal



Crestal Bone Loss

bone may result in a displacement of soft tissue, which can compromise aesthetics. This makes the preservation of crestal bone more important than ever before. It is one of the keys to an aesthetic outcome because it allows for the maintenance of the healthy soft tissue, specifically the interdental papillae and the buccal gingival margin.

## The Accidental Discovery

In 1991, BIOMET 3i introduced 5.0 and 6.0mm wide diameter implants that offered the same external hex interface as their smaller cousins. During this period, some clinicians restored the implants with standard 4.0mm prosthetic components that were smaller than the larger diameter implant platform (Platform Switching).

The radiographic outcomes of these cases gave birth to an accidental discovery. Through time, clinicians restoring

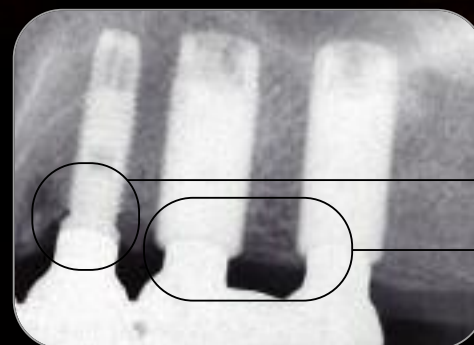
wide diameter or expanded platform implants in this manner have routinely seen a more consistent preservation of crestal bone.<sup>5</sup>

The fact that the implant-to-abutment interface now had a more medial location on the implant platform seemed to be limiting the remodeling of crestal bone.

### 10-Year Bone Levels



1991



Crestal Bone Loss

Platform Switching  
(No Crestal Bone Loss)

2001

## The Certain® PREVAIL® Implant:

*The process of Platform Switching has shown exciting possibilities in preserving crestal bone. The key to achieving consistent crestal bone preservation may be the intentional placement of a smaller diameter abutment on a larger diameter implant platform.*

The experience of platform switching with smaller diameter abutments on larger diameter implants may demonstrate possible preservation of crestal bone and a less angular component to any bone loss. The working hypothesis is that any inflamed connective tissue or component micro-motion actually occupies a more medial location on the implant platform. Because it essentially is resting on the outer circumference of the implant platform, the inflamed connective tissue does not extend laterally to the same extent as it does with a traditional matched Implant-Abutment Junction.



Apical View From Long Axis Of Implant

Note: The Inflammatory Connective Tissue (ICT) Infiltration

- Conventional Implant-Abutment Junction exposes the bone to the ICT

The crestal bone clinically and radiographically appears to maintain its position, while the soft tissue appears not to recede as much as it does with traditional “matched” configurations. In a sense, this implant configuration appears to limit biologic width reformation because the ledge of the implant platform, to a significant extent, may isolate the underlying bone.<sup>4, 5</sup>



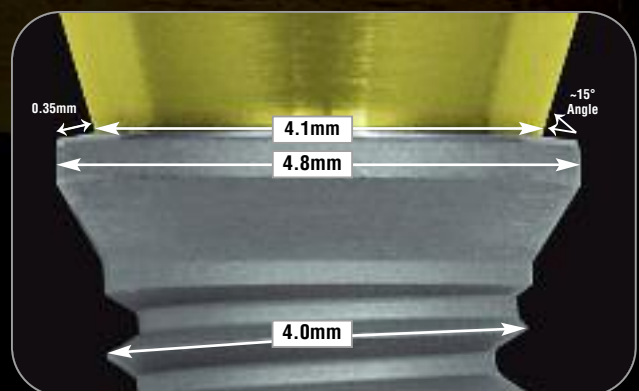
Apical View From Long Axis Of Implant

Note: ICT Does Not Infiltrate Beyond Platform Dimension

- Certain PREVAIL Implant contains the ICT, thus potentially reducing remodeling

By moving the IAJ in from the implant shoulder as we see with the Certain PREVAIL Implant, the bone may be shielded from potential irritants.

As a result, the bone may not cup in order for the biologic width to move down and seal it from the source of irritation. If the bone stays up, there is increased support for the soft tissue.<sup>4, 5</sup>



## Pursuing Crestal Bone For Optimal Aesthetics

BIOMET 3i has created an implant system that is designed to help the clinician in the pursuit of crestal bone preservation. The Certain® PREVAIL® Implant features Integrated Platform Switching, which incorporates a coronal bevel design that medializes the Implant-Abutment Junction.

The PREVAIL Implant's prosthetic table is appropriately color coded to ensure proper matching to the corresponding BIOMET 3i Abutments.

*In multiple implant cases, I have found that the Certain PREVAIL Implant aids in the preservation of inter-implant crestal bone.*

*Tiziano Testori, DDS, MD, Como, Italy*

The Certain PREVAIL Implant may be applicable for clinical cases to include aesthetically challenging cases, sites with limited bone volume, simultaneously sinus grafted sites and adjacent implant sites where papilla formation or maintenance is a clinical challenge.

The Certain PREVAIL Implant features the industry proven OSSEOTITE® Surface that extends the full length of the implant to increase Bone-to-Implant Contact.

In addition, the NanoTite™ PREVAIL Implant combines the OSSEOTITE Surface with nano-scale crystal deposits of Calcium Phosphate (CaP) that render a Bone Bonding® Surface\* to the entire length of the implant.



The Certain PREVAIL Implant is offered in various body styles in order to maximize surgical flexibility. The expanded platform allows the coronal aspect of the implant to engage the crestal region, seal extraction sockets and provide primary stability.<sup>4</sup> In clinical situations where the expanded collar might not fit, the straight collar design provides the option for narrower interdental spaces or limited ridge widths while the NanoTite Tapered Implant may be ideal in cases of convergent tooth roots, ridge concavities or placement in extraction sockets and areas of soft bone.

The Certain PREVAIL Implant offers the Certain QuickSeat® Connection. This provides the clinician with an audible and tactile click that confirms the abutment is properly seated. The double hex allows as many as 12 rotational positions, which is ideal for angled abutments.

\*The interlocking of the newly formed cement line matrix of bone with the implant surface.

*I've used the Certain PREVAIL Implant and find that it has helped me in my quest to preserve crestal bone.*

*Harold S. Baumgarten, DMD  
Philadelphia, PA*



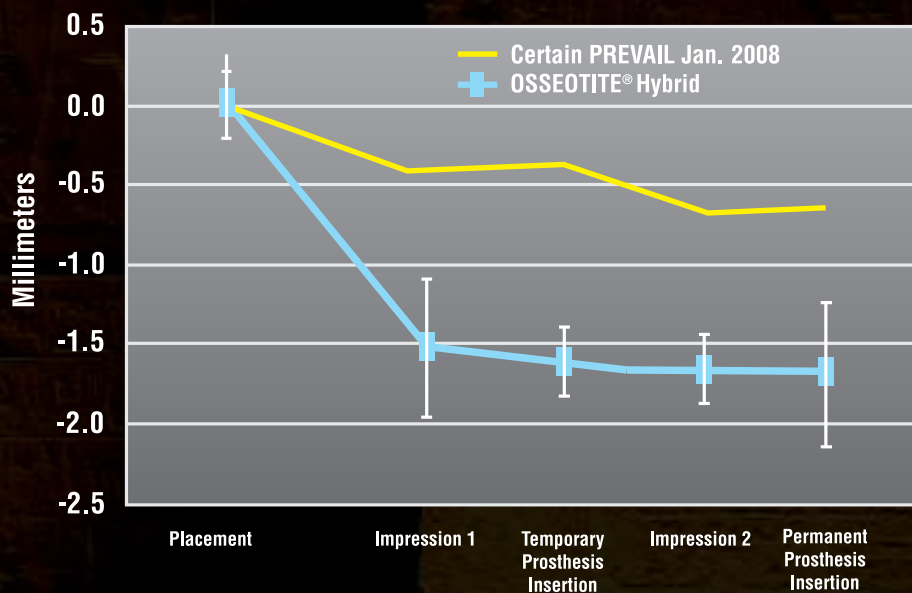
# Prevailing Results With The Certain® PREVAIL® Implant

## Certain PREVAIL Crestal Bone Values From Implant Placement To Permanent Prosthesis Insertion

Interim Analysis of Certain PREVAIL Implants from on-going multicenter clinical trials - January 2008

Radiographs obtained immediately after implant placement surgery and again at impression taking, temporary prosthesis insertion and at permanent prosthesis insertion visits.

### Change From Baseline Mean Values +/- Standard Deviation



*In prospective clinical studies, Certain PREVAIL Implants have demonstrated a mean 0.65mm of bone remodeling by the time of permanent prosthesis insertion. This is less than one-half the bone remodeling exhibited in previous studies with traditional OSSEOTITE Implants with matched Implant-Abutment Junctions.*

## Peer Reviewed Publications

1. Chiche F. *Espace biologique implantaire et esthétique. Le concept de Platform Switching.* Hors-Série Esthétique 2005;May (France).
2. Gardner DM. *Platform Switching as a means to achieving implant esthetics.* NY State Dent J 2005;71:34-7.
3. Grunder U, Gracis S, Capelli M. *Influence of the 3-D bone-to-implant relationship on esthetics.* Int J Periodontics Restorative Dent 2005;25:113-9.
4. Baumgarten H, Cocchetto R, Testori T, Meltzer A, Porter S. *A new implant design for crestal bone preservation: initial observations and case report.* Pract Proced Aesthet Dent 2005;17:735-40.
5. Lazzara RJ, Porter SS. *Platform switching: A new concept in implant dentistry for controlling postrestorative crestal bone levels.* Int J Periodontics Restorative Dent 2006;26:9-17.
6. Vela - Nebot X, Rodríguez - Ciurana X, Rodado - Alonso C, Segalà-Torres M. *Benefits of an implant platform modification technique to reduce crestal bone resorption.* Implant Dent 2006;15:313-319.
7. Calvo Guirado JL, Saez Yuguero MR, Pardo Zamora G, Muñoz Barrio E. *Platform switching with a new implant design.* EDI Journal 2006;2:52-58.
8. Fickl SM, Zuhr O., Wachtel H, Bolz W., Huerzeler M. *Periimplant bone level around implants with platform switched abutments.* International Association for Dental Research Annual Meeting 2006; (Brisbane, Australia), Poster Presentation.
9. Calvo Guirado JL, Saez Yuguero MR, Pardo Zamora G. *Immediate provisionalization on a new implant design for esthetic restoration and preserving crestal bone.* Implant Dent 2007;16:155-159.

# Product Information

## Certain® PREVAIL® Implants

Length	3/4/3mm(D)	4/5/4mm(D)	5/6/5mm(D)	4/3mm(D)	5/4mm(D)
8.5mm	IIOS3485	IIOS4585	IIOS5685	IIOS4385	IIOS5485
10.0mm	IIOS3410	IIOS4510	IIOS5610	IIOS4310	IIOS5410
11.5mm	IIOS3411	IIOS4511	IIOS5611	IIOS4311	IIOS5411
13.0mm	IIOS3413	IIOS4513	IIOS5613	IIOS4313	IIOS5413
15.0mm	IIOS3415	IIOS4515	IIOS5615	IIOS4315	IIOS5415

## NanoTite Tapered PREVAIL Implants

Length	4mm	5mm	6mm
8.5mm	NIITP4385	NIITP5485	NIITP6585
10.0mm	NIITP4310	NIITP5410	NIITP6510
11.5mm	NIITP4311	NIITP5411	NIITP6511
13.0mm	NIITP4313	NIITP5413	NIITP6513
15.0mm	NIITP4315	NIITP5415	NIITP6515

## NanoTite™ Certain PREVAIL Implants

Length	3/4/3mm(D)	4/5/4mm(D)	5/6/5mm(D)	4/3mm(D)	5/4mm(D)
8.5mm	NIIOS3485	NIIOS4585	NIIOS5685	NIIOS4385	NIIOS5485
10.0mm	NIIOS3410	NIIOS4510	NIIOS5610	NIIOS4310	NIIOS5410
11.5mm	NIIOS3411	NIIOS4511	NIIOS5611	NIIOS4311	NIIOS5411
13.0mm	NIIOS3413	NIIOS4513	NIIOS5613	NIIOS4313	NIIOS5413
15.0mm	NIIOS3415	NIIOS4515	NIIOS5615	NIIOS4315	NIIOS5415

**To Prevail In Your Pursuit Of  
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Representative Today.**



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